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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Min-Ho CHA

Serial No. 09/509,326

Examiner: Harish T. Dass

Filed: March 24, 2003

Group Art Unit: 3628

For: AUTOMATIC ORDERING METHOD AND SYSTEM FOR  
TRADING OF STOCK, BOND, ITEM, FUTURE INDEX, OPTION,  
INDEX AND SO ON

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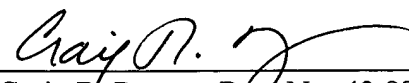
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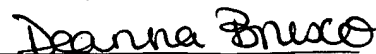
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Deanna Brusco



PATENT APPLICATION  
Attorney Doc. No. 5387-003  
Client Ref. No. CMH99016

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Min-Ho CHA

Serial No. 09/509,326

Examiner: Harish T. Dass

Confirmation No. 1618

Filed: March 24, 2003

Art Unit: 3628

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Date: July 13, 2006

*Deanna Brusco*  
Deanna Brusco

**APPELLANT'S BRIEF  
UNDER 37 CFR §41.37**

Appeal is taken from the Examiner's Office Action mailed May 16, 2006, finally  
rejecting claims 25-37, and the Advisory Action mailed March 1, 2006.

This Appeal Brief is in furtherance of the Notice of Appeal mailed in this case on  
April 3, 2006, and as further directed by the Notice of Panel Decision from Pre-Appeal Brief  
Review dated May 16, 2006.

The fees required under §41.37(a)(2) and any required petition for extension of time  
for filing this Brief and fees therefor are dealt with in the accompanying TRANSMITTAL OF  
APPEAL BRIEF.

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This Brief contains the following items under these headings, and in the order set forth below:

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### **I. REAL PARTY IN INTEREST 37 CFR §41.37(c)(1)(i)**

There is no assignee. The real party in interest is as named in the caption of this Brief:

MIN-HO CHA  
109-204 Daeah Apt.  
Kayang-Dong, Kangseo-Gu  
Seoul, Republic of Korea

### **II. RELATED APPEALS AND INTERFERENCES 37 CFR §41.37(c)(1)(ii)**

There are no other appeals or interferences known to Appellant or the Appellant's representative that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.

**III. STATUS OF CLAIMS**  
**37 CFR §41.37(c)(1)(iii)**

Status of All the Claims:

1. Claims presented: 1-37
2. Claims withdrawn from consideration but not cancelled: NONE
3. Claims cancelled: 1-24
4. Claims pending: 25-37, of which
  - a. Claims allowed: NONE
  - b. Claims objected to: NONE
  - c. Claims rejected: 25-37
5. Claims appealed: 25-37

All of the rejected claims, namely claims 25-37 are being appealed. The appealed claims are eligible for appeal, having been finally rejected.

**IV. STATUS OF AMENDMENTS**  
**37 CFR §41.37(c)(1)(iv)**

On May 10, 2002, the Examiner issued an Office Action rejecting original claim 1 under 35 U.S.C. § 112 because of the use of the phrase “and/or.” Claims 1-3, 5-6, and 8-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter et al (U.S. Patent No. 5,787,402, “Potter”) in view of E\*TRADE Securities, Inc. (“E\*TRADE”). Claims 4, 7, and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter in view of E\*TRADE and further in view of Braddock (U.S. Patent No. 4,412,287). Applicant responded on August 9, 2002 by amending certain claims, cancelling other claims, and arguing against the rejections.

On November 20, 2002, the Examiner issued a Final Office Action rejecting all of the then pending claims. Specifically, claims 1-2, 5 and 8-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter, Gutterman et al (U.S. Patent No. 5,297,031, “Gutterman”), and E\*TRADE. Claims 7 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter, Gutterman, E\*TRADE, and further in view of Braddock.

Applicant responded on April 21, 2003 by filing a Request for Continued Examination along with an Amendment. In the Amendment, Applicant amended certain claims and argued to overcome the rejections.

On July 3, 2003, the Examiner issued a first office action during continued examination again rejecting all claims under 35 U.S.C. § 103(a). Claims 1-2, 5, 11 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter in view of Gutterman. Claims 7-10 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter and Gutterman as previously applied to claims 5 and 11, and further in view of Braddock. On December 3, 2003, Applicant again responded by amending the claims and making argument.

On March 10, 2004, the Examiner issued a second Final Office again rejecting all claims under 35 U.S.C. § 103(a) using a different combination of references. Claims 1-2, 5, 8-11, 14-15 and 17-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter in view of Minton (U.S. Patent No. 6,014,643). Claims 7 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Potter and Minton as applied to claims 5 and 11, and further in view of Braddock. Applicant responded on August 10, 2004 by filing a second Request for Continued Examination cancelling all pending claims and introducing new claims 25-37.

On November 16, 2004, the Examiner issued a first Office Action during the second continued examination rejecting all of the newly presented claims under 35 U.S.C. § 103(a). In addition, claims 29-30 and 34 were objected to under 37 CFR 1.75 as being substantial duplicates of claims 27-28 and 33. Claims 25-26, 28, 30-32 and 35-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minton in view of Kalmus et al (U.S. Patent No. 4,674,044, "Kalmus"). Claims 27, 29 and 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minton and Kalmus as applied to claims 26 and 32, and further in view of Gutterman. Applicant responded on May 10, 2005 by arguing to overcome the rejections. No amendments to the claims were made.

On November 2, 2005, the Examiner issued a Final Office Action maintaining the previous rejections of claims 25-37. Claims 25-26, 28, 30-32, and 35-37 remained rejected

under 35 U.S.C. § 103(a) as being unpatentable over Minton in view of Kalmus. Specifically, broadly citing to generic teachings of the Minton disclosure, the Examiner asserted that:

Minton discloses a data processing method and system which allows individuals to buy and sell securities directly [from] other individuals interactively or automatically through electronic network or internet [see entire document particularly, Abstract; Figures; C1 L4 to C3 L20; C4 L12-L30; C7 L46-L60; C8 L8-L59; C14 L65 to C15 L37], the user selecting a trade desired object and inputting an initial trade condition for selling or purchasing the selected object in the computer system, the initial trading condition including a price for selling or purchasing and a trade-desired quantity [Figure 6-11; C2 L60 to C3 L16; C9 L18-L35; C13 L46-L67], (b) the user inputting an automatic trade condition containing purchase and selling conditions (limit price) in the computer system, the automatic trade condition comprising conditions for deciding a selling price, a selling quantity, a purchase price and a purchase quantity for subsequent orders [Figure 6-11; C2 L60 to C3 L16; C9 L18-L35; C12 L54-L60; C13 L46-L67], (c) the user placing an initial trade order according to the initial trade condition in the computer system through the data communication network [Figure 3; C7 L9 to C8 L7], (d) the computer system, without an intervention by the user, generating and placing a purchase order and a selling order for trade according to the automatic trade condition immediately after the initial trade order has been contracted (it is known that the orders are executed after the orders are entered and immediately after accepted by second trader) [Figure 12; C3 L1-L16; C8 L8-L21; C14 L46 to C15 L25].

Final Office Action, pp. 2-3.

Despite the overly expansive interpretation of the Minton disclosure, the Examiner noted that “Minton does not explicitly disclose (e) immediately after one of the selling order and the purchase order is contracted, the computer system, without an intervention by the user, generating and placing another purchase order and another selling order for trade according to the automatic trade condition, (f) the computer system repeating the process e), wherein the selling order in each of the processes (d) and (e) is higher than the contracted price in each of the processes (d) and (e), and the purchase order price in each of the processes (d) and (e) is lower than the contracted price in each of the processes (d) and (e).” Final Office Action, p. 3. The Examiner mistakenly claimed, however, that “Kalmus discloses these steps [Abs; Figures 2-5; C1 L5 to C2 L9; C4 L22-L50; C5 L60 to C8 L20] to provide an automated market making system for one or more securities,” without supplying any explanation of how the cited disclosure teaches the missing elements. Final Office Action, p. 3. The Examiner

therefore improperly concluded that “[i]t would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine disclosures of Minton and Kalmus to provide an improved data processing based system for implementing an automated trading market for one or more securities.” Final Office Action, p. 3.

Regarding claims 28 and 30, the Examiner mistakenly asserted that “Minton further discloses wherein inputting the automatic ordering condition further comprises drawing up an automatic trade table, where an automatic trade order is generated from the automatic trade table [Figure 4-#425 & #432, Figure 5, # 512; C9 L58-L62; C10 L15-L27].” Final Office Action, p. 4. However, regarding claim 31, the Examiner recognized that:

Neither Minton nor Kalmus explicitly disclose a target profit rate, and calculating a profit rate from the completed contracts before repeating the process (e); comparing the calculated profit with the target profit rate; and the computer system stopping the automatic trading if the target profit it obtained [Figure 12; C9 L31 to C10 L2; C11 L1-L10; C11 L61 to C12 L4;]. However, limit order inherits this feature and calculating the rate is known simply the percent of profit. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include calculating the profit with target profit rate to evaluate if he/she made more or less profit than his/her goal.

Final Office Action, p. 4.

Regarding claim 37, the Examiner asserted:

Minton discloses a user interface at the user computer system for the user to input an automatic trade condition [Figures 1-2; C4 L37 to C7 L8], a memory device for storing basic information data including an item code of a stock and an account number of a stock holder input to the computer system through the user interface [Figures 1-2; C4 L12 to C7 L8], a trade condition control module for storing an automatic stock trade condition based on which a selling order including price and quantity and a purchase order including price and quantity for trade of the stock are determined [Figure 6-11; C2 L60 to C3 L16; C9 L18-L35; C12 L54-L60; C13 L46-L67].

Final Office Action, p. 5. The Examiner also noted, however, that:

Minton does not explicitly disclose a trade order control module for determining whether the automatic stock trade condition has been met and for placing a stock trade order according to the automatic stock trade condition at a new price through the data communication network if the condition is met, wherein through the data communication network, the trade order control module places repeatedly, without an intervention by the user, a new stock selling and a new purchase order

according to the automatic trade condition immediately after the stock selling or purchase order is contracted at a contracted price, the new selling order price is higher than the contracted price, and the new purchase order price is lower than the contracted price.

Final Office Action, p. 5. Again without any analysis, however, the Examiner mistakenly claimed that “Kalmus discloses these steps [Abs; Figures 2-5; C1 L5 to C2 L9; C4 L22-L50; C5 L60 to C8 L20] to provide an automated market making system for one or more securities.” Final Office Action, pp. 5-6. The Examiner therefore improperly concluded that “[i]t would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine disclosures of Minton and Kalmus to provide an improved data processing based system for implementing an automated trading market for one or more securities.” Final Office Action, p. 6.

Claims 27, 29 and 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minton and Kalmus as applied to claims 26 and 32 above, and further in view of Gutterman. Specifically, the Examiner recognized that “[n]either Minton nor Kalmus discloses wherein the automatic trade condition generates selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders.” Final Office Action, p. 6. The Examiner maintained, however that “Gutterman discloses this step [C10 L14-L60; C4 L21 to C5 20] to establish spread position and take a profit.” Final Office Action, p. 6. The Examiner concluded that “[i]t would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Minton and Kalmus, and include selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders, as disclosed in Gutterman, to allow customer to place order to establish or liquidate positions as the market moves up or down.” Final Office Action, p. 6.

The Examiner further improperly rejected Applicant’s arguments that critical limitations of the claims were missing from the prior art references. In responding to those arguments, the Examiner simply regurgitated the earlier conclusory statements, without providing any analysis of how those claim limitations were met by the portions of the references identified. Final Office Action, pp. 7-8. The Examiner further relied on his own



subjective conclusion of what would be known by those of ordinary skill in the art to supply missing limitations, arguing the unsupported proposition that “‘Buy high Sell low’ and there have to be matching selling order and buying order to trade are well known phrases to a person having ordinary skill in the art of security trading.” Final Office Action, p. 8.

Applicant initiated a phone conference with the Examiner and his supervisor on January 27, 2006. During that phone conference, Applicant discussed the substance of the claims and the scope of the prior art. No agreement was reached and the Applicant was requested to submit a written response outlining the arguments. Accordingly, Applicant responded on February 2, 2006 with a detailed analysis of how essential claim limitations were missing from the references cited by the Examiner. For the benefit of the Examiner, Applicant also explained, in layman’s terms, how the claimed invention operates and why those limitations could not be satisfied by the deficient prior art references, either alone or in combination. Claims 25 and 32 were amended to correct typographical errors.

The Examiner issued an Advisory Action on March 1, 2006 rejecting Applicant’s request for reconsideration. Specifically, the Examiner ignored Applicant’s identification of express claim elements missing from the prior art references and improperly treated Applicant’s invention as simply the automation of a prior art process. *See* Advisory Action Continuation Sheet, ¶ 1. The Examiner also improperly refused to give patentable weight to express claim limitations by looking at the preamble independent of the other limitations of the claims. *See id.*, ¶ 2. The Examiner further mistakenly asserted that the claims lacked features, including the absence of human intervention, which were relied on by Applicant in its arguments. *See id.*, ¶ 3. The Examiner also failed to notice the claim markings in the amended claims showing the typographical corrections. *See id.*, ¶ 4.

Applicant timely filed a Notice of Appeal on April 3, 2006 and further requested a Pre-Appeal Brief Conference. The request for a Pre-Appeal Brief Conference was subsequently rejected on May 16, 2006 by a panel of examiners (each of whom had previously issued rejections in this application or otherwise participated in discussions with Applicant regarding the application). This Appeal Brief is timely filed in response to the Notice of Panel Decision from Pre-Appeal Brief Review.

## V. SUMMARY OF THE CLAIMED SUBJECT MATTER

### 37 CFR §41.37(c)(1)(v)

The present invention overcomes numerous problems of the prior art. In particular, prior art of record does not provide a systematic trading method, let alone one that regularly recognizes sustained profits. In addition, trading according to the prior art of record requires repeated human intervention to generate transactions as well as to monitor the market between transactions. These prior art systems also do not use a predetermined trading table to direct multiple trades.

Conventionally, for example, a trader (or his broker) may monitor the market and make a purchase or sell order based on current or future market conditions. For a prior art *market order*, for instance, a trader (through his broker or trading software) initiates a trade based on current market conditions. For a prior art *limit order*, a trader makes an offer to trade based on future market conditions. In each of these cases, the order is generated by the user based on specific known or anticipated market conditions and traders (or their brokers) must constantly monitor the market in order to generate a stream of orders based on changing market conditions. *See, e.g.,* Minton, Kalmus, and Gutterman throughout. Although the user, broker, or both, may use a computer and data communications network to set up the order or specify the conditions under which a trade will occur, the prior art does not teach a systematic approach for conducting multiple subsequent buy and sell orders, nor does it teach a method that will systematically initiate multiple subsequent automatic buy and sell orders without further user input. *See, e.g.,* Minton, Kalmus, and Gutterman throughout.

In contrast, the claimed invention relates to an *automatic ordering method* for trading stocks (or other trade objects) using a computer system that systematically and repeatedly places both buy and sell orders together based on predetermined *automatic trade conditions*, *without additional intervention by the user*. Claim 25, for instance, recites:

25. An *automatic ordering method* for trading of stocks, bonds, items, futures, options, indexes, and/or foreign currencies using a computer system connected to a data communication network, comprising:

(a) the user selecting a trade-desired object and inputting an initial trade condition for selling or purchasing the selected object in the computer system, the

initial trade condition including a price for selling or purchasing and a trade-desired quantity;

- (b) the user inputting an *automatic trade condition* containing purchase and selling conditions in the computer system, the automatic trade condition comprising conditions for deciding a selling price, a selling quantity, a purchase price and a purchase quantity *for subsequent orders*;
- (c) the user placing an initial trade order according to the initial trade condition in the computer system through the data communication network;
- (d) the computer system, *without an intervention by the user*, generating and placing a purchase order and a selling order for trade according to the automatic trade condition *immediately after the initial trade order has been contracted*;
- (e) *immediately after one of the selling order and the purchase order is contracted*, the computer system, *without an intervention by the user*, generating and placing another purchase order and another selling order for trade according to the automatic trade condition; and
- (f) the computer system *repeating* the process (e);

wherein the selling order in each of the processes (d) and (e) is higher than the contracted price in each of the processes (d) and (e), and the purchase order price in each of the processes (d) and (e) is lower than the contracted price in each of the processes (d) and (e).

Claim 25 (emphasis added).

In other words, in the case of stocks, for example, before even initiating trading:

- (a) A user inputs a stock selection, a quantity, and a price; **and**
- (b) The user inputs an automatic trade condition that will be used to control multiple subsequent buy and sell orders placed together. The automatic trade condition can, for instance, be a preset price change or a percentage rate change and can include quantity information.

Then, *after* inputting these conditions:

- (c) The user places an initial trade order, whereupon
- (d) The computer immediately, *without any further instructions from the user*, places both a buy order at the preset price or percentage rate change below the initial trade price and a sell order at the preset price or percentage rate change above the initial trade price; **and**
- (e) As soon as either the subsequent buy order or the sell order is contracted, the computer immediately generates yet *another buy and sell order* using the preset price or percentage rate change *without any further input from the user*; **and** where

(f) The computer then *repeats this process again*.

*See, e.g.*, Claim 25. The other independent claims contain similar novel elements.

The dependent claims add additional novel features not found in the prior art. Claim 27, for instance, requires that the automatic trade condition “generates selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders.” Claim 28 is dependent from claim 27 and further requires “drawing up an automatic trade table, where an automatic trade order is generated from the automatic trade table.” Claims 29 and 30 relate to an automatic trade condition that increases or decreases subsequent order prices by a fixed rate rather than a fixed amount. Claim 31 requires establishing “a target profit rate,” “calculating a profit rate ... before repeating the process,” and “stopping the automatic trading if the target profit is obtained.” The claims dependent from the other independent claims contain similar novel elements.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

### **37 CFR §41.37(c)(1)(vi)**

A. Whether the Examiner failed to establish a *prima facie* case that claims 25-37 are unpatentable under 35 U.S.C. § 103(a) by failing to identify any references or combination of references which contain all the claim limitations, by failing to identify any proper motivation, teaching, or suggestion to combine or modify the references presented, and by relying instead on hindsight and subjective speculation to supply the missing elements and reject the claims.

## **VII. ARGUMENT**

### **37 CFR §41.37(c)(1)(vii)**

A. **The Examiner’s Rejections Under 35 U.S.C. §103(a) were Improperly Based on Subjective Speculation and Hindsight and Further Lacked References Capable of Supporting a *Prima Facie* Case of Obviousness.**

“The PTO has the burden under section 103 to establish a *prima facie* case of obviousness.” *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988) (citing *In re Piasecki*, 745 F.2d 1468, 1471-72 (Fed. Cir. 1984)). A *prima facie* case of obviousness requires a showing that each and every element of the claims is present in some combination of prior art

references, or that the claimed invention would be an obvious modification of those references. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1369-70 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998). To establish a *prima facie* case of obviousness based on a combination of references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant. *See In re Raynes*, 7 F.3d 1037, 1039 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Therefore, the PTO “can satisfy [its] burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d at 1074 (citing *In re Lulu*, 747 F.2d 703, 705 (Fed. Cir. 1984); *see also Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297 n. 24 (Fed. Cir. 1985); and *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis added). Obviousness cannot be established by hindsight combination to produce the claimed invention. *See, e.g., In re Gorman*, 933 F.2d 982, 986 (Fed. Cir. 1991). It is the prior art itself, and not the applicant’s achievement, that must establish the obviousness of the combination. *See Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 (Fed. Cir. 1985). In addition, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *Application of Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

Here, the Examiner failed to satisfy his burden of establishing a *prima facie* case of obviousness. Among other things, the Examiner was unable to identify references capable of supplying important elements of the claims. The Examiner also failed to establish a proper motivation, teaching, or suggestion to combine the prior art references identified and, instead, inappropriately relied on a hindsight reconstruction of the claimed invention.

**1. The Claimed Invention is NOT Simply the Automation of a Manual Process.**

As is apparent from the claim requirements themselves, it would be extremely impractical, if not impossible, to perform the claimed invention manually without the use of a specially-constructed computer program. To manually implement a stock trading system with

the complexity of the claimed invention, a purchaser would, for example, have to pick up the phone, call their broker, and in a single phone call:

- (1) Instruct the broker to buy 100 shares of XYZ stock at \$50 per share and to immediately place a purchase order for 50 more shares at \$40 per share and a sell order for 50 shares at \$60 per share (*see, e.g., claim 25, steps (a), (b), (c), and (d)*); *and*
- (2) Tell him that if he successfully buys 50 more shares at \$40 per share, then he must immediately place a buy order for 50 more shares at \$30 per share and a sell order for 50 shares at \$50 per share... but, if he sells 50 shares at \$60 per share, then he must immediately place a buy order for 50 shares at \$50 per share and a sell order for 50 shares at \$70 per share (*see, e.g., claim 25, step (e)*); *and*
- (3) Further instruct him that if he then sells 50 shares at \$70 per share, then he must immediately place a buy order for 50 more shares at \$60 per share and a sell order for 50 shares at \$80 per share... but if he buys 50 shares at \$50 per share, then he must immediately place a buy order for 50 more shares at \$40 per share and a sell order for 50 shares at \$60 per share... but if instead he sells the 50 shares at \$50 per share, then he must immediately place a buy order for 50 shares at \$40 per share and a sell order for 50 shares at \$60 per share... but if instead he buys 50 shares at \$30 per share, then he must immediately place a buy order for 50 more shares at \$20 per share and a sell order for 50 shares at \$40 per share (*see, e.g., claim 25, step (f)*); *and*
- (4) The purchaser would then still have to go through and explain every purchase and sell order to be generated depending on the entering into each and every one of those previous possible purchase and sell orders, and so on until a predetermined condition is satisfied (*see, e.g., claim 31*)...

The prior art clearly fails to teach such a system.

Furthermore, even if a manual system for performing such a complex transaction existed, it would nonetheless fail to provide numerous benefits of the claimed invention. Such a system, for instance, would still require human intervention (by the broker) to initiate the *subsequent* trade orders. And it would further require real-time monitoring of the market for the broker to determine when previous orders were contracted and *when to generate* the subsequent orders. As a result, a manual system, if it even existed, would be limited by the attention and speed of a broker.

The claimed invention provides a systematic approach for placing repeated subsequent buy and sell orders based on the contracting of a previous order. The claimed invention is also able to generate these subsequent orders *without human intervention* and without a user having to monitor the market constantly and personally issue those orders. The present

invention is therefore capable of automatically selecting and generating many orders per minute through its specially-programmed computer system. Therefore, even if a manual system were taught, it would fail to provide the abilities and advantages of the invention.

The Examiner relies on *In re Venner*, 262 F.2d 91, 95, 120 USPQ 192 (CCPA 1958) to argue that the claims are not patentable because they are directed toward automation. See Advisory Action Continuation Sheet, ¶ 1. *In re Venner* does not, however, stand for the proposition seemingly advocated by the Examiner that claims directed toward automated systems are *per se* unpatentable. Rather, *In re Venner* simply explains that “it is not ‘invention’ to broadly provide a mechanical or automatic means to replace a manual activity which has accomplished the same result.” 262 F.2d at 95. The present case, however, does not present a situation where Applicant is simply claiming the automation of a manual activity. Nor, as explained above, is any manual activity capable of accomplishing the same results.

The Examiner has, in any event, not satisfied his burden in identifying any pieces of prior art, manual or automated, that teach the limitations of the present claims. Rather, several significant limitations of each of the claims are missing from the prior art references relied on by the Examiner.

## **2. The Prior Art Lacks Significant Limitations of the Claims.**

Claims 25-26, 28, 30-32, and 35-37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minton in view of Kalmus. These references, however, whether taken alone or in combination, fail to teach several important limitations of the claims and therefore cannot establish a *prima facie* case of obviousness of the claimed invention. The Examiner’s reliance on these references is misplaced.

### **A. Minton Cannot Provide an Adequate Primary Reference**

Minton merely relates to a data processing and communication system that allows users to connect to each other to purchase and sell securities with minimal broker interaction. See, e.g., col. 2, lines 46-68. Specifically, Minton provides “a data processing system and a network of data processing systems whereby individuals can buy and sell directly from each

other, with only minimal involvement by a broker.” Col. 2, lines 46-49. Minton allows a user to “be able to select among many competing offers to buy and sell” thereby allowing them “to get a better deal than if they were going through a broker. Also, such a network [allows] individuals to make a market in the securities they wish.” Col. 2, lines 49-58. Nowhere does Minton teach or suggest *a process* for systematically generating multiple buy and sell orders immediately upon the contracting of previous orders, let alone *an automated system* for determining when to execute these buy and sell orders and then executing them.

Minton simply recognizes that an initial order can be a market order (that can be immediately contracted) or a limit order (that cannot be contracted until a future condition is satisfied). *See* Minton, col. 9, lines 31-35. For instance, while Minton teaches that a user can place an initial order (alternatively placing either a market order or a limit order) for a security during a given transaction (*see* col. 9, lines 18-35), Minton does not teach or suggest inputting both an initial trade condition and an automatic trade condition into a computer system before initiating the initial trade condition, as required by the present claims. Claim 25, for instance, requires the user to input both an *initial trade condition* as well as an *automatic trade condition* before placing the initial order. *See* Claim 25 (a), (b), and (c). The automatic trade condition is thereafter used to automatically direct *subsequent orders*. *See* Claim 25 (b), (d), (e), (f). Minton therefore fails as a primary reference.

Minton also nowhere teaches the subsequent placement of both a *buy* and a *sell order* together based on the contracting of a previous order. Whereas claim 25 requires that the computer system generate both a *purchase* and a *sell order immediately after the initial trade order has been contracted*. *See* Claim 25 (d). Minton further fails to teach repetition of the ordering process using the automatic trade condition based on the contracting of a previous order. Whereas claim 25 recites multiple iterations of the order placement process based on the contracting of previous orders. *See* claim 25 (d), (e), and (f). Since Minton fails to disclose even the underlying concepts of the presently claimed invention, it certainly lacks any disclosure of automation of that process.

The Examiner seemingly asserts that Minton teaches these significant limitations through nothing more than its mention of a “limit price.” *See* Final Office Action, p. 2 (“(b)



the user inputting an automatic trade condition containing purchase and selling conditions (limit price)"). As noted above, however, in Minton, if a limit order is placed rather than a market order, then the limit order is the only trade order entered before initiating trading and does not follow a separate initial trade order. See Col. 9, lines 30-31 ("When a user places a sell or buy order, this order will be *either* a market order or a limit order." (*emphasis added*)). Furthermore, Minton's limit order discussion certainly does not contemplate the entry of both a buy order and a sell order. See Col. 9, lines 30-31. And Minton further teaches user intervention for each trade and does not suggest a system where the computer program determines when and on what terms to make subsequent orders. See Minton, throughout.

Accordingly, contrary to the Examiner's representations, Minton lacks, among other things, the following limitations of claim 25 (and the similar limitations found in the other independent claims):

- (b) the user inputting an *automatic trade condition* containing purchase and selling conditions in the computer system, the automatic trade condition comprising conditions for deciding a selling price, a selling quantity, a purchase price and a purchase quantity *for subsequent orders*;
  - (d) the computer system, *without an intervention by the user*, generating and placing *a purchase order and a selling order* for trade according to the automatic trade condition *immediately after the initial trade order has been contracted*;
  - (e) immediately after one of the selling order and the purchase order is contracted, the computer system, *without an intervention by the user*, generating and placing *another purchase order and another selling order* for trade according to the automatic trade condition; and
  - (f) the computer system *repeating* the process (e);
- wherein the selling order in each of the processes (d) and (e) is higher than the contracted price in each of the processes (d) and (e), and the purchase order price in each of the processes (d) and (e) is lower than the contracted price in each of the processes (d) and (e).

For each of these reasons independently and collectively, Minton fails to provide an adequate reference supporting the rejection of these claims.

Rather than specifically identify these missing elements in the prior art references, the Examiner instead broadly references passages from Minton that have little to do with these claim limitations. The Examiner then relies on nothing more than conclusory arguments that

those passages somehow teach the claim elements. The Examiner's conclusory statements without any analysis of how Minton actually provides the claim limitations are insufficient to support a *prima facie* case obviousness. See, e.g., *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988) (rejecting bald assertions of prior art teachings which lacked evidentiary support).

In addition to lacking the underlying steps of the claimed process, Minton also fails to teach a computer system that generates and places subsequent buy and sell orders as soon as a previous buy or sell order is contracted. On the contrary, Minton requires human intervention (user or broker) to place each subsequent order. See Minton, throughout. Although Minton's limit order provides future conditions for contracting a single, already placed order, Minton does not generate either a buy or sell order, let alone both a buy and sell limit order based on the contracting of that initial order. And Minton does not teach or suggest providing a system that generates those orders *without human intervention*. See Minton, throughout.

Similarly, the Examiner's argument that "it is known that the orders are *executed* after the orders are entered and *immediately after accepted* by second trader" (Final Office Action, p. 3 (emphasis added)) has nothing to do with the claim limitation of "*generating and placing*" subsequent buy and sell orders *immediately after contracting* the initial order. Again, in Minton, limit order purchases are *contracted* based on future market conditions, but no conditions are taught for *generating* subsequent buy and sell orders based on the contracting of previous orders. For instance, there is no teaching in either Minton or any of the other prior art references that multiple subsequent orders are to be generated based on previously contracted orders.

In contrast, in the claimed invention, subsequent orders are directly "tied" to the immediately preceding contracted orders and are automatically generated by the computer system if the previous order is contracted, at least until a predetermined condition is satisfied. See, e.g., Claim 25 (d), (e), and (f); see also Claim 31. In the prior art, even if future orders become desirable, human intervention is required to place the subsequent buy or sell order. Accordingly, the prior art fails to provide the claimed limitations and the obviousness rejection must be overturned.

B. Kalmus Fails to Supply the Missing Claim Elements.

The Examiner properly recognized that Minton does not disclose “(e) immediately after one of the selling order and the purchase order is contracted, the computer system, without an intervention by the user, generating and placing another purchase order and another selling order for trade according to the automatic trade condition.” Final Office Action, p. 3. And the Examiner further appropriately recognizes that Minton does not teach the repetition of step (e) or that each of the selling orders are at a price higher than the previously contracted price and each of the buying orders is at a price lower than the previously contracted price. See Final Office Action, p. 3. The Examiner, however, improperly looks to Kalmus (U.S. Patent No. 4,674,044) in an attempt to find these missing elements.

Kalmus, however, is even less pertinent than Minton. Kalmus discloses an automated trading market that does not even *generate* buy or sell orders but, instead, simply *processes* buy and sell orders that are generated elsewhere. See, e.g., col. 4, lines 58 – col. 5, line 5 (explaining the process of receiving orders from outside sources). Specifically, Kalmus teaches “an improved data processing apparatus for making an automated market for one or more securities.” Col. 1, lines 41-43. In particular, the “automated market making system ... qualif[ies] and execut[es] orders for securities transactions [by] monitor[ing] the securities position of the market maker, and ... develops and provides information characterizing the market maker’s trading profits.” Col. 1, lines 45-53. “The system retrieves the best obtaining bid and asked prices from a remote database... . Data characterizing each security buy/sell order requested by a customer is supplied to the system. The order is qualified for execution by comparing its specific content fields with predetermined stored parameters. ... Once qualified, the order is executed and the appropriate stored parameters are updated.” Col. 1, line 57 – col. 2, line 2.

Ignoring these express teachings regarding the purpose of the Kalmus system, the Examiner identifies the Abstract; col. 1, line 5 to col. 2, line 9; col. 4, lines 22-50; and col. 5, line 60 to col. 8, line 20 of Kalmus as supposedly supplying the missing claim elements, namely the automatic generation of multiple subsequent buy and sell orders based on the contracting of previous orders. Despite the broad citation to the Kalmus disclosure, however,

the Examiner fails to identify any specific teaching in Kalmus that is even remotely capable of supplying the missing claim limitations. Kalmus, for instance, does not teach inputting both an initial trade condition and an automatic trade condition before initiating the initial trade condition. Kalmus further fails to teach generating either buy or sell orders based on the contracting of an initial order or subsequent orders, let alone generating both buy and sell orders after both the initial order and subsequent orders. And Kalmus also fails to teach repeatedly generating buy and sell orders immediately upon the contracting of a corresponding previous order. *See* Kalmus, throughout.

In fact, Kalmus teaches nothing about a system for automating the *generation* of multiple subsequent buy and sell orders and teaches little, if anything, about the ordering process at all, focusing instead on the way the orders are processed and *executed* in its automated market system. *See* Kalmus, throughout. For each of these reasons, independently and collectively, Kalmus fails to satisfy the missing claim limitations and does not assist in establishing a *prima facie* case of obviousness for rejecting these claims. Claims 25-26, 28, 30-32, and 35-37 are therefore patentable over the prior art of record and the obviousness rejection was improper.

C. Gutterman is Likewise Inapposite to the Claimed Invention.

Claims 27, 29 and 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Minton and Kalmus as applied to claims 26 and 32, and further in view of Gutterman. Specifically, the Examiner recognized that “[n]either Minton nor Kalmus discloses wherein the automatic trade condition generates selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders.” Final Office Action, p. 6. The Examiner maintained, however that “Gutterman discloses this step [C10 L14-L60; C4 L21 to C5 20] to establish spread position and take a profit.” *Id.* The Examiner concluded that “[i]t would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of Minton and Kalmus, and include selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders, as disclosed in Gutterman, to allow customer to place order to establish or liquidate positions as the market moves up or down.” *Id.*

Guttermann, however, fails to supply the elements of the independent and dependent claims missing from the prior art of record. Among other things, although Guttermann's "spread" could perhaps be considered to teach generating a single sale condition, it cannot possibly be considered to teach generating both buy and sell orders after the initial order and subsequent orders. And Guttermann further fails to teach repeatedly generating buy and sell orders immediately upon the contracting of a previous order. More specifically, Guttermann's teachings regarding establishing a spread do not equate to the claimed *automatic trade conditions* governing future buy and sell orders.

Guttermann's teachings simply explain that a spread can be used to define an acceptable profit level at which point the purchaser will be satisfied by the sale of the purchased stock. Guttermann, for instance, explains that using a "spread" a purchaser "may order his broker to 'buy one July pork bellies and sell one February bellies at 80 points difference or more, premium February' ... to establish a new spread position, or to take the profit in a position at a narrower difference and be satisfied with the profit at 80 points difference." Col. 4, lines 59-61. This, however, simply defines a single future trade condition and does not supply an *automatic trade condition* that can be used to generate and place multiple subsequent buy and sell trade orders. The Examiner's rejection of Claims 27, 29, and 33-34 is therefore further improper for these additional reasons.

D. The Examiner Made Additional Errors in His Rejections of the Claims.

In the Advisory Action dated March 1, 2006, the Examiner made additional significant errors in his rejections of the claims. For example, the Examiner alleged that the applicant failed to point out any missing limitation of the claims, asserting that Applicant had done no more than explain the invention in general way. *See* Advisory Action Continuation Sheet. Contrary to the Examiner's statement, however, Applicant had clearly pointed out numerous missing limitations in its response. Applicant, for example, had specifically identified several limitations of claim 25 that were missing from the prior art. *See, e.g.*, Amendment After Final (February 2, 2006), p. 8, lines 2-3 and 22-32; p. 9, lines 19-28.

In addition, the Examiner refused to consider express limitations of the preamble and claims. *See* Advisory Action Continuation Sheet. Specifically, the Examiner improperly

refused to consider the “automatic ordering method” limitation of the preamble, despite the fact that the claim as a whole clearly related to an automatic ordering method and that this phrase therefore breathed life into the claim. *See Catalina Mktg., Int’l v. Coolsavings.com*, 289 F.3d 801, 808-09 (Fed. Cir. 2002). Applicant’s reliance on this phrase during prosecution further transforms it into a claim limitation. *See id.* (“[C]lear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation.”).

The Examiner’s refusal to consider arguments related to “without further instruction from the user” was also inappropriate. “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *See Application of Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). The claims repeatedly use the phrase “without an intervention by the user” (Claim 25, throughout) clearly identifying that no further user instructions are being provided. Accordingly, the Examiner erred in failing to give those arguments consideration.

Finally, the Examiner also improperly overlooked the claim amendments made to correct typographical errors. Claims 25 and 32 were amended to correct typographical errors. Those amendments were clearly reflected in the response to office action and should be entered.

### **3. There is No Motivation, Teaching, or Suggestion to Make the Claimed Combination.**

As explained above, the limitations of the claimed invention are not present in any combination of the prior art references of record. Even were the limitations present in the combination of prior art references relied on by the Examiner, however, there is no motivation to combine the references in the manner suggested by the Examiner. Minton teaches an Interactive Securities Trading System designed to enable individuals to buy and sell directly from each other with only minimal involvement from a broker, which further allows individuals to make markets in any securities they wish. *See Minton*, Col. 2, lines 46-57. In the Minton system, “an individual would be in a similar position to that of a broker, i.e., an individual would have access to many other individuals wishing to buy and sell securities. In

such a network, an individual would be able to select among many competing offers to buy and sell, and thus would be able to get a better deal than if they were going through a broker.” Col. 2, lines 49-55. Minton is therefore designed to provide more direct access between buyers and sellers of securities to reduce oversight by a broker and enable individuals to make a market in any security they wish. *See* Col. 2, lines 60-67.

Kalmus, on the other hand, teaches an Automated Securities Trading System “applicable to securities trading in any market where the market maker acts as a principal [by filling] customer buy orders by selling the security from the market maker’s inventory position.” Col. 1, lines 26-31. This automated market making system simply creates an automated market by qualifying and executing orders for securities transactions that are generated elsewhere. Col. 1, lines 41-47. More specifically, this “system retrieves the best obtaining bid and asked prices from a remote database [and] the order is qualified for execution by comparing its specific content to stored parameters ... such as the operative bid and asked current market prices, the amount of stock available for customer purchase or sale as appropriate, and the maximum acceptable single order size.” Col. 1, lines 57-68.

The Kalmus system of qualifying orders for execution when “the market maker has a position in each security in which he makes a market” (col. 4, lines 55-57) has no applicability to the Minton system which does not provide an inventory of stocks, but instead connects buyers and sellers directly to each other and which provides users with “the ability to make markets in the security of their choosing” (col. 2, lines 66-67). Accordingly, one of ordinary skill in the art would not have been motivated to combine the teachings of Kalmus with the system of Minton because they relate to entirely different trading systems.

There is also no motivation or teaching to combine Gutterman with either Minton or Kalmus to reach the claimed invention. Gutterman provides “a broker workstation for managing orders in a market for trading ... securities.” Abstract. Gutterman explains that “[m]ore than ... a system for merely matching buy and sell orders, the present invention provides a system that allows brokers to manage their decks and to improve the accuracy of communications between the trading floor and the customer.” Col. 5, lines 49-53. Gutterman proposes accomplishing this by providing a broker workstation for managing orders in a

market for trading commodities that gives the broker detailed information and lets them control the order process. *See* col. 5, line 59 – col. 6, line 15. More specifically, “[t]he broker workstation in accordance with [Gutterman] is an electronic replication of the broker’s management of the orders in his deck.” Col. 6, lines 33-35.

Gutterman therefore teaches a tool for a broker that simply gives the broker more information and faster control over the transaction process, it does not relate to a systematic method for a user to trade stocks. Nor does Gutterman teach a system for repeatedly placing orders without user intervention. And significantly, since Gutterman relates to a tool for use by brokers, it certainly would not make sense to combine it with Minton, which is specifically intended to reduce or eliminate broker involvement (*see, e.g.*, Minton, col. 2, lines 46-49). There is simply no motivation, teaching, or suggestion to combine Gutterman with Minton or Kalmus to provide the claimed invention.

**4. The Examiner Improperly Relies on Hindsight and Subjective Speculation to Supply Missing Elements and Combine References.**

In rejecting Applicant’s arguments, the Examiner simply relied on his own subjective conclusion of what would be known by those of ordinary skill in the art to supply missing limitations, arguing, for instance, that “‘Buy high Sell low’ and there have to be matching selling order and buying order to trade are well known phrases to a person having ordinary skill in the art of security trading.” Final Office Action, p. 8. “Buy high Sell low,” however, is not a phrase used in any of the prior art references and runs directly contrary to the purpose of the claimed invention. In order to establish a profit, the claimed invention requires that subsequent selling prices be higher than the previous buying prices. *See, e.g.*, claim 25 (f).

In addition, whether or not there has to be matching orders in order to trade has nothing to do with the claim requirement that subsequent buy and sell orders are generated by the claimed invention immediately after the contracting of a previous order. The claimed invention requires that the buy and sell orders be generated by the same computer system based on the automatic trade conditions. The fact that someone else, somewhere else has generated a buy or sell order that will match the order placed by this system and then be contracted into a sale or purchase is irrelevant. Matching orders to contract a sale or purchase



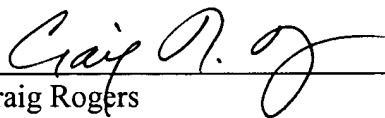
does not somehow teach or suggest placing multiple orders immediately after contracting previous orders.

### CONCLUSION

The Examiner failed to establish a *prima facie* case of obviousness by relying on references that lacked critical claim limitations. The Examiner's combinations of references were also improper because they lacked any reasonable suggestion, motivation, or teaching to combine them in the manner attempted. And the Examiner's conclusion of obviousness was improperly based on a hindsight reconstruction of the claims and on misplaced subjective speculation. For each of the foregoing reasons, independently and collectively, the Appellant respectfully requests favorable consideration by the Board.

Respectfully submitted,

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Date: July 13, 2006

  
Deanna Brusco

**VIII. CLAIMS APPENDIX**  
**37 CFR §41.37(c)(1)(viii)**

The claims involved with the appeal read as follows:

1. – 24. (Canceled)

25. An automatic ordering method for trading of stocks, bonds, items, futures, options, indexes, and/or foreign currencies using a computer system connected to a data communication network, comprising:

- (a) the user selecting a trade-desired object and inputting an initial trade condition for selling or purchasing the selected object in the computer system, the initial trade condition including a price for selling or purchasing and a trade-desired quantity;
- (b) the user inputting an automatic trade condition containing purchase and selling conditions in the computer system, the automatic trade condition comprising conditions for deciding a selling price, a selling quantity, a purchase price and a purchase quantity for subsequent orders;
- (c) the user placing an initial trade order according to the initial trade condition in the computer system through the data communication network;
- (d) the computer system, without an intervention by the user, generating and placing a purchase order and a selling order for trade according to the automatic trade condition immediately after the initial trade order has been contracted;
- (e) immediately after one of the selling order and the purchase order is contracted, the computer system, without an intervention by the user, generating and placing another purchase order and another selling order for trade according to the automatic trade condition; and
- (f) the computer system repeating the process (e);

wherein the selling order in each of the processes (d) and (e) is higher than the contracted price in each of the processes (d) and (e), and the purchase order price in each of the processes (d) and (e) is lower than the contracted price in each of the processes (d) and (e).

26. The method as defined in claim 25, wherein the trade-desired object is stocks, futures,

or options.

27. The method as defined in claim 26, wherein the automatic trade condition generates selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders.

28. The method as defined in claim 27; wherein inputting the automatic ordering condition further comprises drawing up an automatic trade table, where an automatic trade order is generated from the automatic trade table.

29. The method as defined in claim 26, wherein the automatic trade condition generates selling and purchase order prices increased or decreased by a fixed rate from the previously generated orders.

30. The method as defined in claim 29, wherein inputting the automatic ordering condition further comprises drawing up an automatic trade table, where an automatic trade order is generated from the automatic trade table.

31. The method as defined in claim 26, wherein the automatic trade condition in the process (b) includes a target profit rate, and the process (f) further comprises calculating a profit rate from the completed contracts before repeating the process (e); comparing the calculated profit with the target profit rate; and the computer system stopping the automatic trading if the target profit is obtained.

32. An automatic ordering method for trading of securities using a computer system connected to a data communication network, comprising:

(a) selecting, by a user, at least one of the securities to be traded and inputting an initial trade condition and an automatic trade condition containing purchase and selling conditions in the computer system, the automatic trade condition determining a selling price, a selling

- quantity, a purchase price and a purchase quantity in every order subsequently generated;
- (b) the computer system placing an initial order for purchase or sell according to the initial trade condition through the data communication network;
  - (c) when immediately after the initial order is contracted, the computer system automatically, without an intervention by the user, generating and placing both a new sell order and a new purchase order through the data communication network according to the automatic trade condition, the sell order being at a price higher than the contracted price for the initial order and the purchase order being at a price lower than the contracted price for the initial order;
  - (d) when immediately after one of the newly placed sell and purchase orders is contracted, the computer system automatically, without an intervention by the user, generating and placing a new purchase order and a new sell order for trade according to the automatic trade condition, the sell order being at a price higher than the previously contracted price and the purchase order being at a price lower than the previously contracted price; and
  - (e) the computer system repeating the process (d).

33. The method as defined in claim 32, wherein the automatic trade condition generates selling and purchase order prices increased or decreased by a fixed amount from the previously generated orders.

34. The method as defined in claim 32, wherein the automatic trade condition generates selling and purchase order prices increased or decreased by a fixed rate from the previously generated orders.

35. The method as defined in claim 32, wherein inputting the automatic ordering condition further comprises drawing up an automatic trade table, where an automatic trade order is generated from the automatic trade table.

36. The method as defined in claim 32, wherein the automatic trade condition in the

process (b) includes a target profit rate, and the process (f) further comprises calculating a profit rate from the completed contracts before repeating the process (e); comparing the calculated profit with the target profit rate; and the computer system stopping the automatic trading if the target profit is obtained.

37. An automatic ordering system of stocks, the system including a user computer system connectable to a computer system at a stock exchange through a data communication network, the system comprising:

a user interface at the user computer system for the user to input an automatic trade condition;  
a memory device for storing basic information data including an item code of a stock and an account number of a stock holder input to the computer system through the user interface;  
a trade condition control module for storing an automatic stock trade condition based on which a selling order including price and quantity and a purchase order including price and quantity for trade of the stock are determined; and  
a trade order control module for determining whether the automatic stock trade condition has been met and for placing a stock trade order according to the automatic stock trade condition at a new price through the data communication network if the condition is met,  
wherein through the data communication network, the trade order control module places repeatedly, without an intervention by the user, a new stock selling and a new purchase order according to the automatic trade condition immediately after the stock selling or purchase order is contracted at a contracted price, the new selling order price is higher than the contracted price, and the new purchase order price is lower than the contracted price.

**IX. EVIDENCE APPENDIX**  
**37 CFR §41.37(c)(1)(ix)**

None.

**X. RELATED PROCEEDINGS APPENDIX**  
**37 CFR §41.37(c)(1)(x)**

There are no related proceedings.